



E-Cigarettes: Not so Safe

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Article History:

Received: Mar 12, 2023
Accepted: May 19, 2023
Available Online: Jun 02, 2023

Declaration of conflicting interests:

The authors declare that there is no conflict of interest.

How to cite this editorial:

Ullah R, Naz S, Haleema, Abdullah. E-Cigarettes: Not so safe. Pak J Chest Med. 2023;29(02):139-140.

Cigarette smoking is the principal cause of all types of diseases in general and pulmonary diseases in specific. With intervention at some points, cigarette smoking has slowly declined, but many alternatives are becoming popular. Examples include; E-cigarettes or "vaping", Smokeless tobacco, Water pipes.

Electronic cigarettes or e-cigarettes are vaporizers powered by a battery that simulates smoking. It provides some of the behavioural aspects of smoking.¹ It is also called "vaping" and its users are called vaper.² The aerosols inhaled by e-cigarette users are called vapors. There are different varieties, some are similar to traditional cigarettes. Some are automatically activated by taking a puff while others turn on manually by pressing a button.³

There are first-generation devices, second-generation devices, third-generation devices and fourth-generation devices. In all these electronic cigarettes, a liquid called e-liquid is used.⁴ E-liquids usually contain water, propylene glycol, glycerin, nicotine, flavours, additives and differing amounts of contaminants and can also be used without propylene glycol, nicotine or flavours.⁵

It is believed that electronic cigarette helps to quit smoking. There is no good evidence that it has not been proven to be more effective than smoking cessation medicine.⁶ In a review, its role in reducing smoking-related deaths and diseases has been demonstrated.⁷ The long-term effects of the vape are not known. It is estimated that their safety risks to users are similar to those of smokeless tobacco.⁸ The United States FDA's nicotine replacement products may be safer than electronic cigarettes.⁹ There is evidence that nicotine addiction from e-cigarettes compels people to convert to cigarette smoking. In 2016, there were low levels of risk of serious adverse.¹⁰ Mild adverse effects include vomiting, nausea, coughing, abdominal pain, headache, blurry vision and throat and mouth irritation.

Many people in the public health community believe that it helps quit smoking, but they are still concerned about long-term safety and that it may be a gate to young people who become addicted to nicotine and then to tobacco.¹¹ Tobacco control academics are worried about the universal use of e-cigarettes and this might bring hazards to public health just like cigarette smoking for its long-term exposure.¹²

There is a general consensus that electronic cigarettes contain fewer toxic substances than tobacco.¹³ but in the 2016 World Health Organization (WHO) report that the scientific evidence that vaping is effective in the cessation of smoking is scant and uncertain.¹⁴ In 2019, an outbreak of severe lung disease in several states in the US was linked to vaping.¹⁵ Patients who have developed mysterious illnesses started to experience symptoms after using e-cigarettes from a few days to weeks. These patients have few things in common including coughing, shortness of breath, chest pain, and difficulty breathing. Nausea, vomiting, diarrhoea, fatigue, fever, and weight loss were also common symptoms.

Some were seriously ill enough to cause admission to intensive care for oxygen and ventilatory support.

So initially “vape” was regarded as an excellent move towards reducing the adverse effects of cigarette smoking, helping many quit cigarettes but it looks not so simple. Its harmful effects may be less frequent than a cigarette in the lung but are more generalized. Therefore, adequate research is required and concrete measures must be taken to control and regulate it.

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